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EXAMINER

NGUYEN, CHAU T

ART UNIT PAPER NUMBER

2176

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/873,342

Applicant(s)

YOSHII ET AL.

Examiner

Chau Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 and 32-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 32-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/01/2005 has been entered. Claims 11-31 are cancelled. Claims 1-10 and 32-52 are presented for examination.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4-5, 8-10, 32-33, 35-36, 39-43, 45-46 and 49-52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paltenghe, US Patent No. 6,757,826 and further in view of Hoover, US Patent No. 6,209,102.

4. As to claims 1, 32, 42 and 52, Paltenghe discloses a signature processing method for displaying a signature on a display unit, comprising:

an inputting step, of inputting a signature handwritten by a user via a digitizer, the signature being composed of at least one stroke (col. 3, lines 6-15: an individual's signature graphic may be obtained by capturing the pen strokes utilized by an individual to sign their name)

a control step, of displaying, the signature being inputted via the digitizer on the display unit allowing the user to discern the stroke of the signature as the stroke is inputted via the digitizer in said inputting step (col. 1, lines 38-49, col. 5, lines 52-59, and col. 6, line 62 – col. 7, line 6: an individual may visually recognize their own signature while having assurances that their signature was not forged);

However, Paltenghe does not explicitly disclose the signature being inputted via the digitizer on the display unit in a manner that makes it difficult for others to discern the stroke of the signature as the stroke is being inputted via the digitizer in the said inputting step. Hoover discloses a method and apparatus for secure entry of access codes in a computer environment comprising a user inputting his access code such as PIN or Password (signature) into the computer environment to access a transaction, the user also has an option of hiding the PIN (signature) during the process of entering or selecting the PIN by clicking on the button "Hide PIN" in the computer environment (Abstract, Fig. 1 and col. 2, line 25 – col. 3, line 10). It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the teachings

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of Hoover and Paltenghe to include displaying PIN (signature) on the display device with the option of "Hide PIN" during the process of entering or selecting the PIN so it would protect the user's PIN (signature) from disclosure to an attacker who, directly or indirectly obtains the sequence of characters inputted by the user to gain access to a transaction. In addition, it is notoriously well known to the skilled artisan to typically shield sensitive information from others while entering such information in a public area (i.e., manually shielding an ATM keypad with one hand while entering information with the other, doing so makes it difficult for others to see, yet allows the user to see and enter information accordingly).

5. As to claims 2, 33 and 43, Paltenghe and Hoover (Paltenghe-Hoover) disclose determining whether an instruction is given by the user to display the stroke of the signature in a manner and that makes it possible for the user to discern the stroke of the signature; wherein said control step is executed in response to a determination in said determining step that the instruction is given, and wherein said control step includes displaying, in a normal fashion, the stroke of the signature being inputted via the digitizer on the display unit when it is determined in said determining step that the instruction is not given (Paltenghe, col. 1, lines 38-49, col. 5, lines 52-59, and col. 6, line 62 – col. 7, line 6: an individual may visually recognize their own signature while having assurances that their signature was not forged), and it is difficult for the other to discern the stroke of the signature (Hoover discloses a method and apparatus for secure entry of access codes in a computer environment comprising a user inputting his access code

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such as PIN or Password (signature) into the computer environment to access a transaction, the user also has an option of hiding the PIN (signature) during the process of entering or selecting the PIN by clicking on the button "Hide PIN" in the computer environment (Abstract, Fig. 1 and col. 2, line 25 – col. 3, line 10). It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the teachings of Hoover and Paltenghe to include displaying PIN (signature) on the display device with the option of "Hide PIN" during the process of entering or selecting the PIN so it would protect the user's PIN (signature) from disclosure to an attacker who, directly or indirectly obtains the sequence of characters inputted by the user to gain access to a transaction)

6. As to claims 4, 35 and 45 Paltenghe-Hoover disclose the control step includes displaying the stroke of the signature by using a combination of the color background and a color of the stroke of the signature, the combination being such as to make it difficult to discern the stroke of the signature (Paltenghe, col. 3, lines 33-52 and col. 6, lines 27-40 and col. 8, lines 14-29).

7. As to claims 5, 36 and 46, Paltenghe-Hoover disclose wherein, said control step includes displaying the stroke of the signature with an image pattern of the background in a manner that makes it difficult for others to discern the stroke of the signature and that makes it possible for the user to discern the stroke of the signature (Paltenghe, col. 12, lines 31-56).

8. As to claims 8, 39 and 49, Paltenghe-Hoover disclose wherein the portion of the stroke the signature is a portion of the stroke input within a predetermined period of time before the current input time (Paltenghe, col. 12, line 61 – col. 13, line 4).

9. As to claims 9, 40 and 50, Paltenghe-Hoover disclose wherein, said control step includes displaying the stroke of the signature in a flashing manner (Paltenghe, col. 6, lines 27-40 and col. 8, lines 14-29).

10. As to claims 10, 41 and 51, Paltenghe-Hoover disclose wherein the signature comprises coordinate data which is input using a coordinate input unit (Paltenghe, col. 3, lines 46-52 and col. 12, lines 31-56).

11. Claims 3, 34 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paltenghe and Hoover as discussed in claims 1-2, 4-5, 8-10, 32-33, 35-36, 39-43, 45-46 and 49-52 above, and further in view of McConnell et al. (McConnell), US Patent No. 6,148,093.

12. As to claims 3, 34 and 44, Paltenghe and Hoover disclose the claimed invention as discussed in claims 1-2, 4-5, 8-10, 32-33, 35-36, 39-43, 45-46 and 49-52 above. However, Paltenghe and Hoover do not explicitly disclose a registering step, of registering the signature inputted in said inputting step. McConnell discloses user

registers his signature with the writing device on the writing surface (Abstract, Figs. 2-3, 5a and 6, col. 7, lines 53-55 and col. 9, lines 31-39). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of McConnell and Paltenghe-Hoover to include registering the signature inputted in said inputting step. The registered signature is then stored in the database so a newly registered personal signature that is presented for validation is compared with the stored authenticated personal signature in the database.

13. Claims 6-7, 37-38 and 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Paltenghe, US Patent No. 6,757,826 and Hoover, US Patent No. 6,209,102 as discussed in claims 1-2, 4-5, 8-10, 32-33, 35-36, 39-43, 45-46 and 49-52 above, and further in view of Powell et al. (Powell), US Patent No. 5,650,943.

14. As to claims 6, 37 and 47, Paltenghe disclose a control step, of displaying, the signature being inputted via the digitizer on the display unit in a manner that makes it possible for the user to discern the stroke of the signature, while the signature is inputted via the digitizer in said inputting step (col. 1, lines 38-49, col. 5, lines 52-59, and col. 6, line 62 – col. 7, line 6: an individual may visually recognize their own signature while having assurances that their signature was not forged). However, Paltenghe does not explicitly disclose the signature being inputted via the digitizer on the display unit in a manner that makes it difficult for others to discern the stroke of the signature. Hoover discloses a method and apparatus for secure entry of access codes in a computer



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environment comprising a user inputting his access code such as PIN or Password (signature) into the computer environment to access a transaction, the user also has an option of hiding the PIN (signature) during the process of entering or selecting the PIN by clicking on the button "Hide PIN" in the computer environment (Abstract, Fig. 1 and col. 2, line 25 – col. 3, line 10). It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the teachings of Hoover and Paltenghe to include displaying PIN (signature) on the display device with the option of "Hide PIN" during the process of entering or selecting the PIN so it would protect the user's PIN (signature) from disclosure to an attacker who, directly or indirectly obtains the sequence of characters inputted by the user to gain access to a transaction. However, Paltenghe and Hoover do not explicitly disclose wherein, said control step includes displaying the stroke of the signature as broken lines. Powell discloses in Fig. 24A and col. 18, line 49 - col. 19, 60 that a signature is displayed as a dotted line (broken line). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Powell and Paltenghe-Hoover to include the signature is displayed in broken line so it would be hard to detect the signature.

15. As to claims 7, 38 and 48, Paltenghe-Hoover-Powell disclose wherein, said control step includes displaying only a portion of the stroke of the signature in a manner that makes it difficult for others to discern the stroke of the signature and that make it possible for the user to discern the stroke of the signature (Paltenghe, col. 1, lines 38-

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49, col. 5, lines 52-59, and col. 6, line 62 – col. 7, line 6: an individual may visually recognize their own signature while having assurances that their signature was not forged; Hoover discloses a method and apparatus for secure entry of access codes in a computer environment comprising a user inputting his access code such as PIN or Password (signature) into the computer environment to access a transaction, the user also has an option of hiding the PIN (signature) during the process of entering or selecting the PIN by clicking on the button “Hide PIN” in the computer environment (Abstract, Fig. 1 and col. 2, line 25 – col. 3, line 10) . Powell discloses in Fig. 24A and col. 18, line 49 - col. 19, 60 that a signature is displayed as a dotted line (broken line). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Powell and Paltenghe-Hoover to include the signature is displayed in broken line so it would be hard to detect the signature).

### ***Response to Arguments***

In the remarks, Applicant(s) argued in substance that

A) The combination of the prior art (Paltenghe and Hoover) would not have the feature “a control step of displaying a signature being inputted via a digitizer on a display unit in a manner that makes it difficult for others to discern the stroke of the signature as the stroke is being inputted via the digitizer in the inputting of the signature, while yet

allowing the user to discern the stroke of the signature as the stroke is inputted via the digitizer in the inputting”.

As to point A, Paltenghe discloses in col. 3, lines 6-15 that an individual's signature graphic may be obtained by capturing the pen strokes utilized by an individual to sign their name, and in col. 1, lines 38-49, col. 5, lines 52-59, and col. 6, line 62 – col. 7, line 6: an individual may visually recognize their own signature while having assurances that their signature was not forged. It is notoriously well known to the skilled artisan to typically shield sensitive information from others while entering such information in a public area (i.e., manually shielding an ATM keypad with one hand while entering information with the other, doing so makes it difficult for others to see, yet allows the user to see and enter information accordingly).

In addition, Examiner's introduced Hoover reference which discloses a method and apparatus for secure entry of access codes in a computer environment comprising a user inputting his access code such as PIN or Password (signature) into the computer environment to access a transaction, the user also has an option of hiding the PIN (signature) during the process of entering or selecting the PIN by clicking on the button “Hide PIN” in the computer environment (Abstract, Fig. 1 and col. 2, line 25 – col. 3, line 10). It would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the teachings of Hoover and Paltenghe to include displaying PIN (signature) on the display device with the option of “Hide PIN” during the process of entering or selecting the PIN so it would protect the user's PIN (signature)

from disclosure to an attacker who, directly or indirectly obtains the sequence of characters inputted by the user to gain access to a transaction.

B) There is no suggestion or motivation to combine Paltenghe and Hoover.

As to point B, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Paltenghe discloses a digital graphic signet for transmitting a private communication, which is similar accessing a transaction in a computing environment by inputting access code (PIN or password which is considered as a signature) of Hoover, thus Paltenghe and Hoover are analogous arts. Therefore, it would have been obvious to one of ordinary skills in the art at the time the invention was made to combine the teachings of Hoover and Paltenghe to include displaying PIN (signature) on the display device with the option of "Hide PIN" during the process of entering or selecting the PIN so it would protect the user's PIN (signature) from disclosure to an attacker who, directly or indirectly obtains the sequence of characters inputted by the user to gain access to a transaction.

C) Nothing has been found or pointed out in McConnell that would teach or suggest inputting and control steps as recited in claim 1.

As to point C, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this case, Examiner's used Paltenghe and Hoover to reject claim 1. Therefore, Applicant(s) cannot argue claim 1 based on McConnell reference, which has been used to reject claim 3.

16. Applicant's arguments filed 09/01/2005 have been fully considered but they are not persuasive. Please see the rejection and response to arguments above.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau Nguyen whose telephone number is (571) 272-4092. The Examiner can normally be reached on Monday-Friday from 8:30 am to 5:30 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Heather Herndon, can be reached at (571) 272-4136.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. On July 15, 2005, the Central Facsimile (FAX) Number will change from 703-872-9306 to 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chau Nguyen  
Patent Examiner  
Art Unit 2176

*William L. Bashore*  
**WILLIAM BASHORE**  
**PRIMARY EXAMINER**  
*11/19/2005*